Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Elder Grove School District #8, 1532 S 64th St W, Billings, MT 59106

2. Type of action: Application for Beneficial Water Use Permit 43Q 30147261

3. Water source name: Groundwater

4. Location affected by project: Section 17, T1S, R25E, Yellowstone County

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant proposes to divert groundwater, by means of two wells, 44 and 44.5 feet deep, from January 1 to December 31 at 255 GPM up to 15.26 AF, from two points in the SWSWSW Section 17, T1S, R25E, for domestic use from January 1 to December 31 and lawn and garden irrigation use from April 15 to October 15. The Applicant proposes to irrigate lawn and garden on 5.5 AC. The place of use is generally located in SWSW Section 17, T1S, R25E, Yellowstone County on the west end of Billings at the corner of Hesper Road and 64th Street West. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)
Montana Department of Natural Resources and Conservation
Montana Sage Grouse Habitat Conservation Program
Montana Natural Heritage Program
United States Fish and Wildlife Service
United States National Resource Conservation Service

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity **-** The source of supply is groundwater and therefore is not listed as dewatered. Modeling of groundwater in the area indicates availability of water. Appropriation of groundwater will deplete surface water in Canyon Creek. Canyon Creek is not listed as dewatered by the Montana Department of Fish, Wildlife and Parks. The Department of Natural Resources and Conservation has operated a gage on Canyon Creek since May of 2016. The available water in Canyon Creek minus all legal demands is greater than the modeled depletion.

Determination: No Significant Impact

Water quality **-** The source of supply is groundwater and therefore is not listed as impaired. The proposed project will not affect surface water quality.

Determination: Not Applicable

Groundwater **-** The proposed project will draw water from a large region of the Yellowstone alluvial aquifer. Modeling indicates that the available water in the aquifer is greater than all legal demands. The proposed use is lawn and garden irrigation and domestic use that have little possibility of affecting groundwater quality. DNRC hydrogeologists have determined that no existing water rights will experience significant drawdown due to the proposed project.

Determination: No Significant Impact

DIVERSION WORKS - The means of diversion are submersible pumps in two wells 44 and 44.5 feet deep. The wells are in place and were drilled by a licensed well contractor. No channel or flow changes will occur, no riparian areas will be impacted, and no dams or barriers are proposed.

Determination: No Impact

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species **-** According to the Montana Natural Heritage Program there are no plant species of concern in the project area. Twelve animal species of concern include the Townsend's Big-eared Bat, Spotted Bat, Hoary Bat, Little Brown Myotis, Great Blue Heron, Pinyon Jay, Spiney Softshell, Snapping Turtle, Plains Hog-nosed Snake, Western Milksnake, Greater Short-horned Lizard and the Sauger. Use of a well to provide water to a lawn and garden irrigation system and domestic use to a school will not affect any habitat for mammals, birds, reptiles, or fish. No barriers to movement or migration would be created. The project is not within Sage Grouse habitat as mapped by the Montana Sage Grouse Habitat Conservation Program.

Determination: No Impact

Wetlands **-** There are several wetlands and associated ponds in the general area of the project although none are mapped by the United States Fish and Wildlife Service. Groundwater used for irrigation would not impact wetland resources.

Determination: No Significant Impact

Ponds – No ponds will be created or removed as part of the proposed project.

Determination: Not Applicable

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - According to the United States National Resource Conservation Service the dominant soil type in the project area is loam or clay loam with 0 to 1% slopes. The soil is well drained and non-saline to moderately saline. The low slopes and low salinity of soils in the project area indicate low possibility for instability or saline seeps. Lawn and garden irrigation will locally increase soil moisture.

Determination: No Significant Impact

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS – The existing vegetative cover is irrigated agriculture. The change in vegetative cover will be to lawn and garden and a building. No habitat will be created or lost. Construction may provide an avenue for the establishment or spread of noxious weeds. It will be the responsibility of the landowner to monitor and remove noxious weeds.

Determination: No Significant Impact

AIR QUALITY – Lawn and garden irrigation and domestic use have no potential to affect air quality.

Determination: No Impact

HISTORICAL AND ARCHEOLOGICAL SITES – The project is not located on State or Federal Lands.

Determination: Not Applicable

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY – Use of groundwater for lawn and garden irrigation eliminates the use of treated potable city water for irrigation and reduces demand on the water treatment plant. The school building will require energy and water in excess of current usage on the project area.

Determination: No Significant Impact

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - The local environmental plans and goals are represented by City of Billings building codes and zoning. The project is consistent with zoning and codes.

Determination: No Impact

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - The project is located in a populated urban area on a heavily trafficked street in a development with few through going routes. No wilderness areas or recreational activities can be accessed through the project area.

Determination: No Impact

HUMAN HEALTH – Lawn and garden irrigation and domestic use have no potential to negatively impact human health.

Determination: No Impact

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No__**X**_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: Not Applicable

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* No significant impact

(b) *Local and state tax base and tax revenues?* No significant impact

(c) *Existing land uses?* The project will take farm land out of production to provide the location of an expanded school facility. The loss of farm land in west Billings is a continuing situation. No significant impact

(d) *Quantity and distribution of employment?* No significant impact

(e) *Distribution and density of population and housing?* Housing may be encouraged in proximity to the school. Population density and number of housing units is consistently increasing on the west edge of Billings. No significant impact.

(f) *Demands for government services?* Demand for treated water would be eliminated. Roads would need to be improved to handle expected traffic and fire and police services would be needed. No significant impact

(g) *Industrial and commercial activity?* No significant impact

(h) *Utilities?* Water from the municipal treatment facility would be eliminated. Electricity to run the pumps would be required.

(i) *Transportation?* The appropriation of water will not affect traffic, but the expanded school would be expected to increase traffic particularly during certain times of the day. No significant impact

(j) *Safety?* No significant impact

(k) *Other appropriate social and economic circumstances?* No significant impact

2. ***Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts: No secondary impacts are recognized.

Cumulative Impacts: The area of the proposed project is to the west of Billings, MT and is subject to rapid growth and development. To the west subdivisions are being developed continuously and businesses are being built to serve the increased population. The project has little environmental impact on the surrounding growth. No current water right applications are pending within the local area.

3. ***Describe any mitigation/stipulation measures:*** None

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** The only reasonable alternative to the project is a no action alternative. The no action alternative would prevent the school district from expanding to serve the school-aged population. There are no significant environmental benefits to the no action alternative.

PART III. Conclusion

1. ***Preferred Alternative:*** Issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

2 ***Comments and Responses:*** None

3. ***Finding:***
*Yes___ No__**X**_ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: The Environmental Assessment found no significant adverse environmental issues related to the proposed project and some possible positive impacts and is the appropriate level of analysis.

Name of person(s) responsible for preparation of EA:

Name: Mark Elison

Title: Regional Manager
Date: 2/26/2020